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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,562	10/09/2001	Toshikazu Yoshikawa	4296-145-US	4594

7590

03/11/2005

Mathews Collins Shepherd & Gould  
100 Thanet Circle Suite 306  
Princeton, NJ 08540

EXAMINER
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MAIER, LEIGH C

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/890,562

Applicant(s)

YOSHIKAWA ET AL.

Examiner

Leigh C. Maier

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

Claims 5-10 are again rejected under 35 U.S.C. 103(a) as being unpatentable over MURASE et al (US 5,478,812) in view of CYNSHI et al (PNAS, 1998).

Applicant's arguments filed December 20, 2004 have been fully considered but they are not persuasive.

Applicant contends that Cynshi does not teach that all anti-oxidants are useful for arteriosclerosis treatment because the reference discusses drawbacks of some anti-oxidants. This is not persuasive because the fact that a particular anti-oxidant is less effective than another does not mean that it is without utility.

Applicant interprets Cynshi as teaching that relatively few anti-oxidants can be used as effective therapeutic agents because the reference describes screening 600 newly synthesized anti-oxidants, "with the most promising candidate having only mixed results as an arteriosclerosis treatment." The examiner respectfully disagrees with this interpretation. In fact the reference states "[BO-653] provides additional evidence in support of the oxidized-LDL hypothesis, and itself is a promising candidate antioxidant for clinical use." See abstract. The examiner would also add that the selection of one promising candidate out of 600 that were screened does not mean that the other 599 candidates were completely ineffective.

Applicant further notes that Cynshi reports that  $\alpha$ -tocopherol has modest effect to no effect on spontaneous development of arteriosclerosis. However, this fact does not appear to be particularly relevant because the claim is not drawn to a method of prevention.

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The balance of Applicant's argument is concerned with the fact that the instant compounds are water-soluble while Cynshi suggests that lipophilicity would be beneficial. The examiner maintains that it would be obvious over the art of record to use the instant compounds to treat arteriosclerosis because Murase had taught that they are more effective anti-oxidants than  $\alpha$ -tocopherol, and this utility was suggested. However, its *in vivo* effectiveness would not be expected to be greater than  $\alpha$ -tocopherol, in view of the teaching of Cynshi. Therefore, as was noted in the previous Office action, a showing that the instant compounds have greater effectiveness in treating arteriosclerosis would be an unexpected result.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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*Examiner's hours, phone & fax numbers*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh Maier whose telephone number is (571) 272-0656. The examiner can normally be reached on Tuesday, Thursday, and Friday 7:00 to 3:30 (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson (571) 272-0661, may be contacted. The fax number for Group 1600, Art Unit 1623 is (703) 872-9306.

Visit the U.S. PTO's site on the World Wide Web at <http://www.uspto.gov>. This site contains lots of valuable information including the latest PTO fees, downloadable forms, basic search capabilities and much more.

*Leigh C. Maier*

Leigh C. Maier  
Primary Examiner  
February 25, 2005